MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 2, 2015 / 2016 SESSION

TPS 2491 – PHYSICAL SECURITY

(All sections / Groups)

29 February 2016
2:30 p.m. – 4:30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 6 pages, excluding the cover page.
2. Attempt **FIVE** questions out of **SIX** questions. The distribution of the marks for each question is given.
3. Please write **ALL** your answers in the Answer Booklet provided.

QUESTION 1

a) The level of asset protection is very much depends on the types of physical security systems and countermeasures employed.

Describe the **FIVE (5)** level of protection that could be used to measure the protection level for public residential area, private organisations and government agencies.

[5 marks]

b) Generally, a crime is an act that violates a political or moral law of any one person or social grouping. Specifically, a crime is a violation of criminal law (criminal standards of bad behaviour).

Provide **SIX (6)** categories of crime addressed by physical security.

[3 marks]

c) Briefly explain the personalities and the behavioral of a person who has high level of ***psychoticism*** and ***extraversion***.

[2 marks]

Continued ...

QUESTION 2

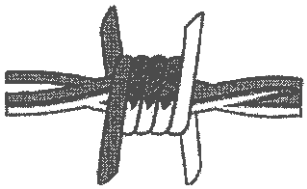
a) Describe how Crime Prevention through Environmental Design (CPTED) could help to reduce the occurrence of crime.

[4 marks]

b) Contrast between *learning* and *control* theory of crime. Provide the causes of crime for each of the theory.

[3 marks]

c) Given the following figure.



Identify the object shown in the figure above. Briefly explain the recommended settings of the object.

[3 marks]

Continued ...

QUESTION 3

a) There are many varieties of physical intrusion detection systems available in the market, thus, understanding how different types of intrusion detection systems work will help you customize a security plan to address your facility's specific needs.

Describe a typical physical intrusion detection system process.

[4 marks]

b) Dato John owned a very expensive facility plant in an industrial land near Melaka city. The land was installed with a six feet chain-link fence at the boundary of his land. Recently, there are some trespassers on his land. Therefore, Dato John plans to add an intrusion detection (ID) system on the existing fence. He wants the ID system to be as high reliability as possible.

What ID system would you recommend to John? And why?

[4 marks]

c) What are the differences between master key and grand-master key?

[2 marks]

Continued ...

QUESTION 4

a) Contrast between the microwave and audio interior sensors for detecting intruders.

[4 marks]

b) Closed Circuit Television (CCTV) systems provide the added benefit of documenting the events of an intrusion and the characteristics of the intruder. The video motion detection system can be added to the CCTV to enhance it capability.

Describe how the operating principle of the video motion detection system work in a typical CCTV system.

[3 marks]

c) In your opinion, which type of guard is more suitable for protecting residential area such as condominium or housing area? And why?

[3 marks]

Continued ...

QUESTION 5

a) Identify **FOUR (4)** kinds of information security threats that may happen in an organisation.

[2 marks]

b) XYZ Company adopted the operation security (OpSec) principles to protect their company information. Because the business information are the important assets of the company. Ms. Alice is the OpSec program manager and must aware of the OpSec intelligence cycle.

Provide **THREE (3)** reasons why Ms. Alice should be aware of the OpSec intelligence cycle?

[3 marks]

c) What is the difference between *physical security surveys* and *crime prevention surveys*?

[2 marks]

d) Mr. James is the CEO of the ABC-buy.com Company that sells products to online users. He is concerned about the losses of the company. He estimated the probability of failure event in a year is 0.025 and the expected financial loss due to a single failure of the server is about RM 15,000. In order to prevent the failure from happening, a security firm had proposed to implement a security systems which cost about RM 90000 per annum.

Calculate the Annualized Loss Expectancy (ALE) and make recommendation to Mr. James whether the security systems is worthwhile for him to invest? Kindly provide your answer with justification.

[3 marks]

Continued ...

QUESTION 6

a) What is the purpose of having a security policy review in an organisation? How often this review should be carried out?

[3 marks]

b) Which type of fire extinguisher can be used to put out a fire caused by flammable chemical gases?

[1 mark]

c) What is forensics sciences? Why it is important?

[3 marks]

d) Define **TWO (2)** layers of digital forensic analysis.

[3 marks]

End of Paper